AMENDMENTS TO THE DRAWINGS

The attached sheets of the drawings include a change to Figure 5. The Replacement Sheet replaces the original sheet including Figure 5, and the Annotated Sheet shows the change made to Figure 5. The act 60 has been changed to act 61.

REMARKS

I. Office Action Summary

In the non-final Office Action dated September 22, 2006, the Examiner presented rejections regarding claims 1 – 21. The Examiner rejected claims 11 and 16 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner rejected claims 1 – 4, 10, and 15 under 35 U.S.C. §102(e) as being anticipated by Islam et al. (US 2003/0035430 A1). The Examiner rejected claims 5 – 9, 11 – 14, and 16 – 21 as obvious under 35 U.S.C. §103(a) in view of the following combination of references:

Claims	**Prior Art Reference(s)**
5 – 7, 11, 12, and 13	Islam et al. + Vairavan (US 2002/0083344 A1)
8	Islam et al. + Vairavan + Krupka et al. (US 5,483,467)
9	Islam et al. + Vairavan + Krupka et al. + Wilson et al. (US 4,292,465)
16 – 21	Vairavan + Wilson et al. + Webb et al. (US 2002/0120741 A1)

Claims 1 – 3, 5 – 7, 9, 11 – 13, 15 – 17, and 21 are currently amended. No new matter was added as a result. Claim 8 has been canceled.

II. Claim Rejections Under 35 U.S.C. §112

Claim 11

Claim 11 is currently amended to correctly depend on a previous claim, as shown above.

Claim 16

Claim 16 is currently amended to correct the error of repeating "with the interface", as shown above.

III. Claim Rejections Under 35 U.S.C. §102

Rejection of claims 1 – 4, 10, and 15 as being anticipated by Islam et al.

Claim 1

Claim 1 is currently amended to incorporate the limitation of claim 8. Currently amended claim 1 recites, *inter alia*:

> "receiving unanalyzed content at a local area network;
>
> passing the unanalyzed content to a switch in the local area network;
>
> analyzing the unanalyzed content at the switch and generating analyzed data; and
>
> routing the analyzed data to a device in the local area network in communication with the switch, **wherein the switch comprises a plurality of ports, and wherein analyzing the unanalyzed content at the switch comprises the switch scanning the plurality of ports and applying a content analysis algorithm to each of the plurality of ports**."

Islam et al. does not teach a switch scanning the plurality of ports and applying a content analysis algorithm to each port. Accordingly, currently amended claim 1 is not anticipated by Islam et al.

Krupka et al. discloses "a scanner 30 for automatically and, preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20." (column 6, lines 57 – 61). The scanner 30 is used in regards to the status of physical cable interconnections. There is no showing that scanner 30 scans the computer and user ports, it just senses the interconnection arrangement of patching cables. Also, there is no showing of a switch (scanner 30 is not a switch), nor is there a showing of a switch that scans a plurality of ports, which are included within the switch, and applies a content analysis algorithm to each port. Furthermore, paragraph 48, lines 1 – 7 of Vairavan merely states that "port configuration may be designed and updated by a network administrator," but there is no teaching that the switch (networking device 110) applies a content analysis algorithm to each port. All the claim limitations are not taught by the combination of the cited references.

Additionally, there is no motivation or suggestion to combine Krupka et al. with Islam et al. and Vairavan because the physical and functional aspects of the switches described in Islam et al. and Vairavan cannot be combined with the scanner 30 of Krupka et al. without physically as well as functionally changing the scanner 30, altering its original purpose. Also, Krupka et al. is concerned with status of physical interconnection of cables, not content analysis of data passing through switches used in local area networks. The Examiner uses improper hindsight to combine the above references. Accordingly, the *prima facie* case for obviousness has not been met. Therefore, currently amended claim 1 is allowable over the cited references. Reconsideration is respectfully solicited.

Claims 2 – 7 and 9 – 11 are dependent claims, and, therefore, their allowability directly follows from the allowability of independent claim 1.

Claim 15

Claim 15 is currently amended and recites, *inter alia*:

> "establishing a communication link between a switch in each of a plurality of subscriber networks and an application management appliance of a managed service provider network via an external communications network;
>
> transmitting one of instructions or update information for a content analysis application from the application management appliance to the switch in each of the plurality of subscriber networks; and
>
> receiving performance metrics of the content analysis application from each of the plurality of subscriber networks, **wherein the switch in each of the plurality of subscriber networks comprises a plurality of ports, and wherein receiving performance metrics comprises receiving performance metrics for each of the plurality of ports in substantially real time.**"

Islam et al. does not teach receiving performance metrics for each port in substantially real time. Paragraph 38, lines 5 – 8, of Islam et al. shows that "management applications may sample the system statistics periodically." There is no teaching of receiving performance metrics for each port, let alone receiving the performance metrics in substantially real time. Accordingly, currently amended claim 15 is not anticipated by Islam et al. Therefore, currently amended claim 15 is allowable and reconsideration is respectfully solicited.

IV. Claim Rejections Under 35 U.S.C. §103

A. Rejection of claims 5 – 7, 11, 12, and 13 over Islam et al. and Vairavan

Claim 12

Claim 12 has been currently amended to incorporate the limitation of claim 8 similar to currently amended and allowable claim 1. Currently amended claim 12 recites, *inter alia*:

"establishing a communication link between the switch of the local area network and the managed service provider network via the external communications network;

transmitting port configuration instructions from the managed service provider network to the switch of the local area network, the port configuration instructions comprising instructions to configure a **plurality of ports** at the switch to implement at least one content analysis function **and to cause the switch to scan and apply the at least one content analysis function to each of the plurality of ports**."

Accordingly, the arguments made for claim 1, as shown above, apply to currently amended claim 12. Therefore, currently amended claim 12 is allowable for at least this reason.

Claims 13 and 14 are dependent claims, and, therefore, their allowability directly follows from the allowability of independent claim 12.

Also, as mentioned above, claims 5 – 7 and 11 depend from independent and currently amended claim 1, and, therefore, are allowable for at least this reason.

B. Rejection of claim 8 over Islam et al., Vairavan, and Krupka et al.

Claim 8 has been canceled, as shown above, rendering the rejection moot.

C. Rejection of claim 9 over Islam et al., Vairavan, Krupka et al., and Wilson et al.

As mentioned above, claim 9 depends from independent claim 1, and, therefore, is allowable for at least the reasons provided with respect to claim 1.

D. Rejection of claims 16 – 21 over Vairavan, Wilson et al., and Webb et al.

Claim 16

Claim 16 recites, *inter alia*:

> "a plurality of ports each configured for communication with a respective external device, each of the plurality of ports comprising:
>
> an interface connection adapted for connecting with a communication line of an external device;
>
> a processor in communication with the interface connection;
>
> a memory in communication with the processor;
>
> **an application buffer in communication with the processor and the memory, wherein the application buffer contains logic operative on the processor to analyze a content of information passing between the external device and the port**; and
>
> **a communication bus in communication with each of the plurality of ports, the communication bus adapted to carry information between the plurality of ports, wherein the switch is configured to analyze the content of information passing through each of the plurality of ports**."

Column 29, lines 16 – 24 of Wilson et al. shows "[e]ach receive port and each transmit port of every processor contains a microprocessor dedicated to performing its respective function," but there is no teaching that the "respective function" relates to analyzing (at each port) the content of information passing through each port.

Also, Figure 1D of Webb et al. does not teach an application buffer. Additionally, paragraph 161 describes Figure 4, not Figure 1D, and it shows a segmentation and reassembly unit 42 with logic for converting messages to fabric cells as well as message classification and routing. There is no teaching of an application buffer or information passing between an external device and a port, let alone an application buffer analyzing the content of the passing information.

Furthermore, paragraph 160 lines 23 – 26 of Webb et al. merely shows that an "interface 34 provides an interface between the processor module bus and the UDASL switch interface converter circuit 1082." There is no showing that the processor module bus is in communication with each of the ports of a switch, and there is no showing that the processor module bus carries information between the plurality of ports. Therefore, Webb et al. does not teach "a communication bus in communication with each of the ports, the communication bus adapted to carry information between the plurality of ports."

The combination of Vairavan, Wilson et al., and Webb et al. does not teach all the limitations of claim 16.

In addition, there is no suggestion or motivation to combine Vairavan, Wilson et al., and Webb et al. First, Wilson et al. shows ports of internal microprocessors (29, lines 16 – 24), not ports of a switch, and Webb et al. discloses an 8 port switch fabric (Figure 1D) that is structurally and functionally different than a plurality of ports on the networking device of Vairavan. Therefore, each of the inventions of the cited references would have to be physically and functionally altered to a point where the original purpose of each invention will not be satisfied if combined. Also, Wilson et al. shows a distributed telex switch with different levels of processor control to handle a large number of telecommunications calls (column 1, lines 42 – 50), not a switch for internet and intranet connectivity as well as associated security, routing, and management functions like shown in Vairavan (paragraphs 10 and 24). Furthermore, in paragraph 4 of the background of Webb et al. there is an assertion that prior art solutions to alleviate network computing system bottlenecks are to spend more money and add more hardware. Adding the integrated networking device of Vairavan is contrary to the purpose of the Webb et al. invention that advocates a more efficient use of computing system resources (paragraph 55). Webb et al. teaches away from Applicant's claim because Applicant's claim introduces new hardware to address the problem of bottlenecks (Applicant's specification, paragraph 2).

Accordingly, the *prima facie* case for obviousness has not been met. Therefore, claim 16 is allowable over the cited references. Reconsideration is respectfully solicited. Claims 17 – 21 are dependent claims, and, therefore, their allowability directly follows from the allowability of independent claim 16.

V. Conclusion

In light of the above amendment and remarks, Applicant submits that all of the pending claims are in condition for allowance. If any questions arise or issues remain, the Examiner is invited to contact the undersigned at the number listed below in order to expedite disposition of this application. Reconsideration and allowance of pending claims 1 – 7 and 9 – 21 is respectfully solicited.

Respectfully submitted,

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ANNOTATED SHEET
Patent Application for: SYSTEM AND METHOD FOR PROVIDING DATA CONTENT ANALYSIS IN A LOCAL AREA NETWORK
Inventor(s): EDWARD A. WALTER
Attorney Docket No. and Serial No.8285/601; 10/682,366

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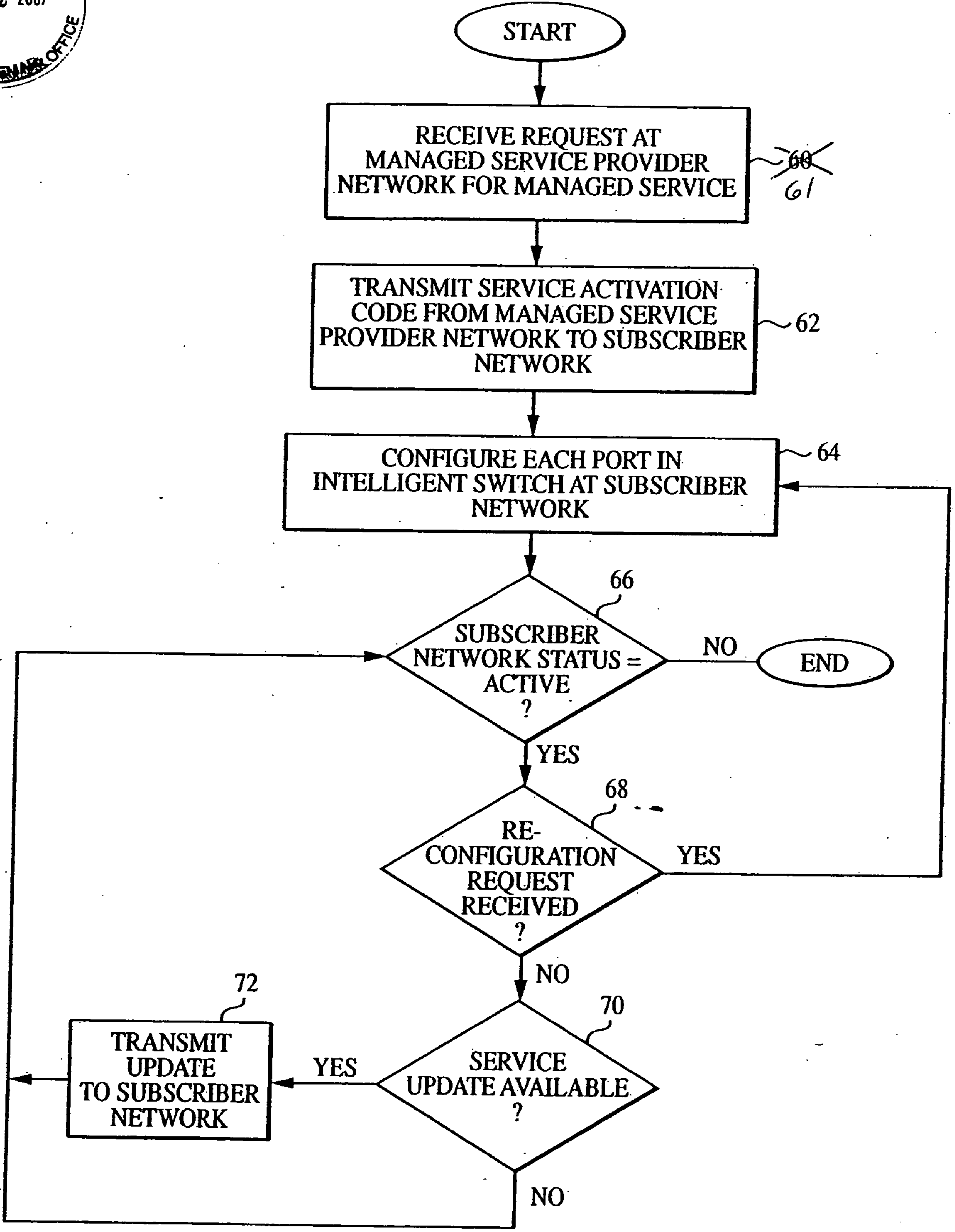
START
RECEIVE REQUEST AT MANAGED SERVICE PROVIDER NETWORK FOR MANAGED SERVICE
~~60~~
61
TRANSMIT SERVICE ACTIVATION CODE FROM MANAGED SERVICE PROVIDER NETWORK TO SUBSCRIBER NETWORK
62
CONFIGURE EACH PORT IN INTELLIGENT SWITCH AT SUBSCRIBER NETWORK
64
66
SUBSCRIBER NETWORK STATUS = ACTIVE ?
NO
END
YES
68
RE-CONFIGURATION REQUEST RECEIVED ?
YES
NO
72
70
TRANSMIT UPDATE TO SUBSCRIBER NETWORK
YES
SERVICE UPDATE AVAILABLE ?
NO

FIG. 5